

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010026**Date Inspected:** 05-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Fawen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG & TOWER Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 007 located on SEG3004H – PP111. Welder is identified as 048433.

ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – B – U2 – F.

FCAW process welding of weld joint # 044 located on FB3090 – 001. Welder is identified as 045209. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – B – U2 – F.

FCAW process welding of weld joint # 007 located on SEG3001P – PP109. Welder is identified as 045227. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – B – U2 – F.

BAY 5

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This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 008 located on Traveler Rail 10TR3 – 024. Welder is identified as 204342.

ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

FCAW process welding of weld joint # 006 located on Traveler Rail 11TR3 – 012. Welder is identified as 215078.

ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

FCAW process welding of weld joint # 011 located on Traveler Rail 10TR3 – 024. Welder is identified as 205390.

ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

FCAW process welding of weld joint # 014 located on Traveler Rail 11TR3 – 005. Welder is identified as 215185.

ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

This QA Inspector observed the following work not in compliance:

During random visual inspection, Caltrans Quality Assurance (QA) Inspector observed that twenty six (26) traveler rails (I-beam) had been distorted after welding. The maximum distortion/out of flatness was measured to be approximately 20 mm. The traveler rail component measured is identified as 10TR3 – 035. The contractor has failed to comply with the requirements of AWS D1.5 Section 3.4 for the traveler rail components by not using either proper procedure or weld sequencing to minimize the distortion.

The affected traveler rails are:

10TR2 – 021; 10TR2 – 022; 10TR1 – 017; 10TR1 – 021; 10TR2 – 001; 10TR2 – 016; 10TR3 – 013; 10TR3 – 029; 10TR3 – 036; 10TR3 – 016; 10TR3 – 027; 10TR3 – 028; 10TR3 – 033; 10TR3 – 030; 10TR3 – 010; 10TR3 – 035; 10TR3 – 018; 10TR3 – 016; 10TR3 – 014; 10TR3 – 012; 10TR3 – 019; 10TR3 – 008; 10TR3 – 038; 10TR3 – 007; 10TR3 – 015; 10TR3 – 034.

This QA notified ZPMC QC identified as Mr. Zhong Chong Biao and ABF inspector identified as Mr. Yu kim of the above issue and that an incident report will be generated.

BAY 6

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004552

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. EP3002 – 001 – 002; 004 – Green Tag # 10372
2. EP3008 – 001 – 001 – Green Tag # 10373

Tower

This QA Inspector observed the following work in progress:

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SMAW process repair welding of weld joint #8B located on Tower Strut WD1 – A305 – 65M – 4. Welder is identified as 053753. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) – FCM – Repair – 1.

SMAW process repair welding of weld joint #2B located on Tower Strut WD1 – A305 – 65M – 2. Welder is identified as 048617. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) – FCM – Repair – 1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
